ABSTRACT

The treatment of effluents in which a flow of the effluents is subjected to a pulsed electric field that modifies physicochemical and biologic characteristics of the medium, this modification being used during a solid/liquid separation operation, of the settlement or membrane filtration type. The solid/liquid separation operation and the application of a pulsed electric field are operations carried out at different locations along the effluent flow. The pulsed electric field has voltage value, current value, pulse repetition frequency, and voltage front shape characteristics chosen such that the required effluent treatment can be achieved as a function of the locations at which these membrane filtration operations are carried out and a pulsed electric field is applied.